

**Calibration of the Highway Safety Manual for Missouri  
Addendum**

**Update of HSM Rural Multilane Calibration Factors**

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16. Abstract This addendum updates the Missouri HSM calibration factors for two facilities: Rural Multilane 3-Leg Stop-Controlled Intersections (RM_3ST) and Rural Multilane 4-Leg Stop-Controlled Intersections (RM_4ST). The updated calibration factors correct for crashes omitted due to missing intersection numbers associated with rural multilane intersections.					
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## Update of HSM Rural Multilane Calibration Factors

A review of crash data associated with rural multilane intersection crashes revealed that some crashes were omitted by mistake in the original report. This issue was specific to two facility types: Rural Multilane 3-Leg Stop-Controlled Intersections (RM\_3ST) and Rural Multilane 4-Leg Stop-Controlled Intersections (RM\_4ST). According to the TMS system, when a travelway is divided by a median, there are two separate intersections numbers that are assigned, one for each direction of travel. Figure 1 shows an example of a two intersection numbers associated with a single rural multilane intersection. Previously, some crashes were omitted because one intersection number was omitted.



**FIGURE 1 Example of Four Leg Rural Multilane Intersection Crashes**

After re-querying the crash data for both rural multilane intersection types, a new calibration was performed. The previous and new results are shown in Table 1. The results show an increase in the calibration factors for both facility types. The Rural Multilane Divided Highway Segments (RDM\_SEG) calibration factor was not changed, but is shown in Table 1 for completeness.

**TABLE 1 Summary of calibration factors results**

Facility Type	RM_3ST		RM_4ST		RDM_SEG	
Calibration Factor	Revised	Previous	Revised	Previous	Revised	Previous
	1.08	0.28	0.73	0.39	0.99	0.99